tional study was comprised of 70 patients with male factor infertility referred to Alvand Fertility and Infertility Center. All patients had azoospermia. Standard evaluation consisted of history and physical examination with extreme attention to sexual history and testes examination including testes size and varicocele. Lab evaluations were done in accordance with the indication consisted of FSH, testosterone, LH, prolactin and inhibin-B. Testis biopsy was performed in all the cases according to the indication. The mean inhibin-B level was compared in groups with positive and negative sperm retrieval.
Results: The mean age of 70 azoospermic patients were 32.14±6.2, the youngest patient was 20, and the oldest was 50. All the couples had primary infertility and the duration of infertility was 74.33±64.64 months. Mean testicular volume was 10.14±6.34cc. Mean FSH and LH was 17.55±13.86 mIU/ml and 11.33±5.17 mIU/ml consecutively. Mean serum prolactin and testosterone were 308.77±139.95ng/ml and 5.45±7.34ng/dl respectively. Mean serum inhibin-B 138.23±239.16 pg/ml (15-1500). Sperm was not retrieved in 81.6% of the cases, whereas in 12.9% of cases biopsy revealed spermatogenesis. The mean FSH of positive and negative group were 9.78±2.13 and 22.56±2.46 mIU/ml respectively, which have statistically significant difference (Independent t-test, p=0.000). The mean LH, prolactin, and testosterone level were not statistically different between the two groups. The mean inhibin-B levels were 129±45.46 and 158.93±47.24 pg/ml which did not show a statistically significant difference (Independent t-test, p=0.77).
Conclusion: Inhibin-B is still not an appropriate predictive factor for testicular spermatogenesis.

MP-02.14
Prevalence of disease in brothers of patients with varicocele: a comparison with healthy controls
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Introduction: We performed a study to examine brothers of patients with varicocele to determine the familial risk for varicocele.
Methods: Ninety-five patients with varicocele who presented with infertility, testicular pain, or cosmetic problems were enrolled in the study. Their healthy brothers were asked to refer and examined. A total of 131 men without varicocele aged 10 years or older were assessed along with their 56 brothers with varicocele. A group of 150 men referred for employment examinations were selected as control group and assessed for varicocele.
Results: The mean ages of the patients, their brothers and the controls were 21.8 ± 8.1 years, 20 ± 8.9 years, and 19.2 ± 5.6 years, respectively. Varicocele was seen in all, 60(45%), and 15(10%) of them, respectively. Varicocele grades 1, 2, and 3 were seen in 8(14.3%), 9(16.1%), and 49(87.5%) of the patients, in 20(15.3%), 24(18.3%), and 30(22.9%) of their brothers, and in 2(1.3%), 2(1.3%), 3 (2%) of the controls, respectively. Bilateral involvement was present in 10(17.9%), 14(10.6%), and 5(3.3%) of the patients in the three groups, respectively. The overall frequency of varicocele and the frequency of grades 2 and 3 varicocele were significantly higher in brothers of the patients than in the controls ($P < .01$; $P < .05$).
Conclusions: The high frequency of varicocele among the brothers of our patients may be an indicative of a hereditary behavior of the disease, warranting more investigation in this regard.

MP-02.15
Seminal plasma interleukin-10 levels and effect on seminal parameters
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Introduction: In the present study, seminal plasma Interleukin-10 (IL-10) level in infertile patients with and without varicocele was compared to levels in normal fertile cases. The relation between seminal plasma IL-10 and seminal parameters were evaluated for the effects of these cytokines on varicocele physiopathology.
Methods: A total of 30 infertile patients with varicocele (Group 1) and 30 patients without varicocele were enrolled into the study. Serum gonadotropin and sex steroids levels were measured in these patients. Semen analysis was performed after 2 and 5 days of sexual abstinence. Additionally, seminal plasma IL-10 levels were measured with *micro-ELISA* methods. Thirty fertile cases without any scrotal pathology were accepted as control group (Group 3).
Results: There was statistically meaningful difference between two groups on seminal parameters ($p<0.05$). Seminal plasma IL-10 levels were higher in infertile patients (Group 1 and Group 2) than control subjects. However, there was not statistically significant difference in IL-10 levels ($p=0.107$). The relationship between seminal plasma IL-10 level and seminal plasma parameters were evaluated separately. Seminal plasma IL-10 levels showed negative, but insignificant relationship with seminal parameters in both of infertile groups, and between morphology and motility in control subjects. However, this relationship was positive and statistically meaningful between IL-10 levels and spermatozoa number ($r=0.370$, $p=0.044$).
Conclusion: This study showed that seminal plasma IL-10 level increase in infertile patients. This increase was slightly evident in idiopathic infertile patients. While IL-10 levels showed positive correlation with seminal parameters, increased level of this cytokine have demolishing affect on spermatogenesis.

MP-02.16
Evaluation of the reactive oxygen species in peripheral and testicular vein in patients with varicocele
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Introduction: Recent studies have suggested an association between sperm dysfunction and production of reactive oxygen species (ROS). Moreover, it was suggested that oxidative stress has an important role in sperm dysfunction in patients with varicocele. The aim of this study was to determine the free oxygen radicals from peripheral vein and testicular vein blood samples of the men with infertility or clinical varicocele before varicocelectomy.
Methods: A total of 18 patients with varicocele were recruited in this study. Spermograms of patients were evaluated at least two times. During the operation, blood samples of 2 cc were drawn from the testicular side of the spermatic vein before ligation of varicocele veins. Synchronous blood samples were drawn from the corresponding peripheral vein as well. Superoxide dismutase (SOD), glutathione peroxidase and glutathione reductase levels were measured at testicular and peripheral blood erythrocytes; malondialdehyde and total antioxidant capacity were measured at plasma. All patients were clinically evaluated in the following postoperative first and third